

WHAT IS CLAIMED IS:

1. A computer-implemented method for providing access to on-demand resources on a computerized apparatus, comprising:
 - receiving an enablement code;
 - validating the enablement code;
 - enabling an on-demand resource, if the validating is successful;
 - storing an enabled state of the on-demand resource;
 - allowing a function to use the enabled on-demand resource; and
 - in response to a change from the enabled state to a non-enabled state of the on-demand resource, initiating a grace period during which the function may continue to use the on-demand resource while in the non-enabled state.
2. The computer-implemented method of claim 1, wherein initiating the grace period is a system function not invoked by a user-input enablement code.
3. The computer-implemented method of claim 1, wherein the enabled state is described by information contained in a smart chip.
4. The computer-implemented method of claim 1, wherein enabling comprises unlocking the on-demand resource.
5. The computer-implemented method of claim 1, wherein validating comprises verifying that the enablement code is unique to the on-demand resource.
6. The computer-implemented method of claim 1, wherein the function is logical partitioning.

7. The computer-implemented method of claim 1, wherein the at least one on-demand resource is a processor.
8. The computer-implemented method of claim 1, wherein the at least one on-demand resource comprises one of memory and storage.
9. The computer-implemented method of claim 1, wherein initiating the grace period comprises initiating a countdown.
10. The computer-implemented method of claim 1, further comprising:
during the grace period, receiving, by the computerized apparatus, an enablement code which places the on-demand resource into the enabled state; and
terminating the grace period.
11. The computer-implemented method of claim 1, further comprising:
terminating the grace period; and then
preventing the function from further use of the on-demand resource.
12. The computer-implemented method of claim 1, wherein storing the enabled state comprises storing the enabled state to a persistent storage device.
13. The computer-implemented method of claim 12, wherein the change from the enabled state to the non-enabled state is caused by removal of the persistent storage device.
14. A computer-implemented method for providing access to on-demand resources on a computerized apparatus, comprising:
enabling an on-demand resource;
allowing a function to use the on-demand resource;
disabling the on-demand resource; and

allowing the function to continue using the on-demand resource for a limited period of time after disabling the on-demand resource in order to give a user of the computerized apparatus an opportunity to request and receive an enablement code configured to enable the on-demand resource.

15. The computer-implemented method of claim 14, wherein disabling the on-demand resource is caused by removal of a persistent storage device containing state information for the on-demand resource.

16. The computer-implemented method of claim 14, wherein allowing the function to continue using the on-demand resource for a limited period of time is a system function not invoked by a user-input enablement code.

17. The computer-implemented method of claim 14, further comprising preventing the function from using the on-demand resource after expiration of the limited period of time.

18. The computer-implemented method of claim 14, wherein enabling comprises unlocking the on-demand resource.

19. The computer-implemented method of claim 14, wherein the enabled state is described by information contained in a smart chip.

20. A computer-implemented method for providing access to an on-demand resource on a logically partitioned computerized apparatus, comprising:

claiming, by a logical partition function, the use of the on-demand resource;

recording the logical partition function's use of the on-demand resource as state information;

changing the state information, whereby use of the on-demand resource by the logical partition function is made incompliant with respect to the state information; and

initiating a grace period during which the logical partition function is allowed to continue using the on-demand resource for a limited period of time after changing the state information.

21. The computer-implemented method of claim 20 wherein changing the state information is caused by removal of a persistent storage device containing the state information for the on-demand resource.
22. The computer-implemented method of claim 20, wherein initiating the grace period comprises initiating a countdown timer.
23. The computer-implemented method of claim 20, further comprising terminating the grace period if the system is returned to a compliant state.
24. The computer-implemented method of claim 20, wherein allowing the function to continue using the on-demand resource for a limited period of time is a system function not invoked by a user-input enablement code.
25. The computer-implemented method of claim 20, further comprising preventing the function from using the on-demand resource after expiration of the grace period.
26. The computer-implemented method of claim 20, wherein the state information further comprises enablement code information indicating whether or not the use of the on-demand resource is authorized.
27. The computer-implemented method of claim 20, wherein the state information is contained in a smart chip.

28. A computer readable medium containing a program which, when executed, performs an operation for providing access to an on-demand resource on a computerized apparatus, the operation comprising:

recording a compliant state of the computerized apparatus, with respect to the on-demand resource, in which a system function uses the on-demand resource with authorization;

determining an incompliant state, with respect to the on-demand resource, in which the system function uses the on-demand resource without authorization; and

initiating a grace period during which the system function may continue to use the on-demand resource while in the incompliant state.

29. The computer readable medium of claim 28, wherein the system function is a partition manager.

30. The computer readable medium of claim 28, wherein initiating the grace period comprises initiating a countdown counter.

31. The computer readable medium of claim 28, further comprising preventing the system function from using the on-demand resource after expiration of the grace period.

32. The computer readable medium of claim 28, further comprising terminating the grace period if the system is returned to a compliant state.

33. The computer readable medium of claim 28, wherein recording the compliant state comprises writing to a smart chip.

34. The computer readable medium of claim 28, wherein determining the incompliant state comprises reading a smart chip.

35. The computer-implemented method of claim 28, wherein the on-demand resource is one of a processor, memory and storage.
36. A computerized apparatus, comprising:
 - on-demand resources configured to be claimed for use by a function; and
 - a capacity manager configured to:
 - enable the on-demand resources for use by the function, wherein the computerized apparatus is in a compliant state when the function only claims usage of the enabled on-demand resources and does not claim any disabled on-demand resources; and
 - initiate a grace period during which the function may continue to use the on-demand resources while in the incompliant state for a defined period of time.
37. The computerized apparatus of claim 36, wherein the capacity manager is further configured to implement an enforcement policy restricting the use of the on-demand resources after expiration of the grace period.
38. The computerized apparatus of claim 36, wherein the function is a partition manager for managing a plurality of logical partitions.
39. The computerized apparatus of claim 36, further comprising a persistent storage device to store state information used to determine whether the computerized apparatus is in the compliant state or the incompliant state with respect to the function's claim to usage of the on-demand resources.
40. The computerized apparatus of claim 36, wherein the on-demand resources comprise at least one of a processor, memory and storage.

41. The computerized apparatus of claim 36, wherein the capacity manager is configured to enable the on-demand resources by unlocking the on-demand resources and making the on-demand resources available for use upon request.
42. The computerized apparatus of claim 36, wherein the capacity manager is further configured to receive enablement codes configured to enable the on-demand resources.
43. The computerized apparatus of claim 42, wherein the capacity manager is configured to determine whether each enablement code is valid by determining whether the enablement code is unique to the computerized apparatus.